

CLAIMS

What is claimed is:

1. A system comprising:

an inner weir having a top surface;

an overflow wall having a top with at least one recess, the at least one recess having a bottom;

wherein the top surface of the inner weir is below the bottom of the at least one recess;

and

a structure connecting the overflow wall and the inner weir so as to form a drainage basin, the drainage basin having at least one drain hole.

2. The system of claim 1 wherein the top surface of the inner weir has an inside edge and an outside edge, the top surface of the inner weir being tapered downwardly from the inside edge to the outside edge, wherein the inside edge of the top surface is below the bottom of the at least one recess.

3. The system of claim 1 wherein the at least one recess is saw-toothed, rectangular, or semi-circular.

4. The system of claim 1 further comprising a drain valve fluidly connected to the at least one drain hole, the drain valve having an open and closed position so that the at least one drain hole is hermetically sealed when the drain valve is closed and allows fluid to freely flow through the at least one drain hole when the drain valve is opened.

5. The system of claim 1 further comprising a drain valve fluidly connected to the at least one drain hole, the drain valve having an open and closed position so that the at least one drain hole is hermetically sealed when the drain valve is closed and allows fluid to freely flow through the at least one drain hole when the drain valve is opened; wherein the top surface of the inner weir has an inside edge and an outside edge, the top surface of the inner weir being tapered downwardly from the inside edge to the outside edge, wherein the inside edge of the top surface is below the bottom of the at least one recess; and wherein the at least one recess is saw-toothed.

6. A process tank comprising the system of claim 1.

7. The process tank of claim 6 wherein the process tank is a rinsing tank, a drying tank, or a chemical treatment tank.

8. A method comprising the steps of:

providing a process tank comprising the system of claim 1;

supplying a liquid to the process tank wherein the liquid comprising contaminants overflows the inner weir, fills the drainage basin, and overflows the overflow wall through the at least one recess of the overflow wall; and

wherein upon discontinuing the supply of liquid to the process tank, the contaminants do not reenter the process tank.

9. The method of claim 8 wherein the at least one drain hole is fluidly connected to a drain valve having an open and closed position so that the at least one drain hole is hermetically

sealed when the drain valve is closed and allows fluid to freely flow through the at least one drain hole when the drain valve is opened.

10. The method of claim 9 wherein the drain valve is opened essentially in
5 concurrence with discontinuing the supply of liquid to the process tank.

11. The method of claim 8 wherein the top surface of the inner weir has an inside
edge and an outside edge, wherein the top surface of the inner weir is tapered downwardly from
the inside edge to the outside edge, wherein the inside edge of the top surface is below the
10 bottom of the at least one recess.

12. The method of claim 8 wherein the at least one recess is saw-toothed, rectangular,
or semi-circular.

13. The method of claim 8 wherein the at least one drain hole is fluidly connected to a
drain valve having an open and closed position so that the at least one drain hole is hermetically
sealed when the drain valve is closed and allows fluid to freely flow through the at least one
drain hole when the drain valve is opened; wherein the top surface of the inner weir has an inside
edge and an outside edge, the top surface of the inner weir being tapered downwardly from the
15 inside edge to the outside edge, wherein the inside edge of the top surface is below the bottom of
the at least one recess; and wherein the at least one recess is saw toothed.